



Microwave Devices Market Overview, Trends, and Future Outlook, 2025–2032

The global [microwave devices market](#) was valued at USD 5.85 billion in 2021 and is expected to grow from USD 6.09 billion in 2022 to USD 9.88 billion by 2029, registering a CAGR of 7.15% during the forecast period. In 2021, North America led the market, accounting for a 33.33% share.

The global microwave devices market experienced a 7.5% decline in 2020 due to the COVID-19 pandemic, which led to reduced demand across all regions. Microwave devices, essential for applications such as satellite communication, radar, electronic warfare, and medical systems, offer advantages like high data transfer rates, low power consumption, and secure connections. Their ability to operate across various frequency bands and pass through the ionosphere makes them vital for communication and defense systems. Growing demand for compact, lightweight, and durable devices with enhanced capabilities in harsh environments is driving innovation, particularly in military and aerospace sectors. Notable developments include the U.S. Air Force awarding Leidos a USD 26 million contract in February for its Mjölnir high-power microwave weapon and CAES receiving multiple contracts in July 2021 to supply RF and microwave components for a U.S. missile defense program.

List of Key Players Profiled in the Report:

- Analog Devices Inc. (U.S.)
- Communications & Power Industries LLC (U.S.)
- General Dynamics Corporation (U.S.)
- Kratos Defense & Security Solutions, Inc. (U.S.)
- L3Harris Technologies, Inc. (U.S.)
- MACOM Technology Solutions Inc. (U.S.)
- Microsemi Corporation (U.S.)
- Microwave Technology, Inc. (U.K.)
- Qorvo Inc. (U.S.)
- Richardson Electronics, Ltd. (U.S.)
- Teledyne Technologies Incorporated (U.S.)
- Thales Group (France)
- TMD Technologies Ltd (U.K.)
- Toshiba Corporation (Japan)

- Cytex Corporation (U.S.)

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<https://www.fortunebusinessinsights.com/microwave-devices-market-103542>

Segmentation:

Active Segment to Lead the Market Due to Rising Demand from Networking & Telecom Services

By type, the market is bifurcated into active and passive. The active segment is expected to hold a dominant share in the global market due to increasing demand for these devices in telecom and networking services.

Increasing Adoption of Ku-Band to Drive the Segment Growth

Based on frequency, the market is divided into Ku-Band, Ka-Band, S-Band, C-Band, X-Band, L-Band, and others. The Ku-Band segment leads the market share due to its rising space and defense application adoption during the forecast period.

Rising Demand for Telecommunication Services to Bolster Segmental Growth

On the basis of end-use industry, the market is segmented into telecommunication, space, defense, industrial, healthcare, and others. The increasing demand for telecommunication services is expected to fuel the segmental growth.

Finally, by geography, the market is categorized into North America, Europe, Asia Pacific, and the Rest of the World.

Report Coverage:

The report provides completely analyzed data regarding recent developments and trends in the market, including the impact of COVID-19 pandemic. Also, the ongoing Russia-Ukraine war crisis is discussed further in this report. Drivers and restraints affecting the global market growth during the forecast period are highlighted further along with the regional insights on segmented market areas. A list of key market players is mentioned further in this report.

Drivers & Restraints:

Increasing Demand for Improved Communication Services to Bolster Market Growth

The market is expected to witness rapid growth during the projected period due to increasing demand for 5G network services in various industries. Also, the rising demand for medical instruments equipped with microwave devices is expected to fuel the market growth in the coming years. Furthermore, the increasing need for enhanced communication services is anticipated to drive the global market.

However, the high risk of communication jamming may hamper the market growth in the coming years.

Regional Insights:

North America Dominates Global Market Share Due to Rising Adoption of Advanced Communication Services

North America dominated the global microwave devices market share in 2021. The regional market stood at USD 1.95 billion in 2021. This is attributed to the increasing adoption of advanced communication systems in aviation, defense, commercial, and industrial sectors.

Europe is expected to grow at a substantial CAGR during the forecast period due to increasing semiconductor production and its utilization in healthcare, automotive, and manufacturing industries in the U.K., Germany, and France.

Competitive Landscape:

New Product Launch Allow Companies to Propel Growth

The key players focus on implementing several strategies to improve their business performance. These strategies include forming strategic alliances, collaborations, and partnerships. Also, introducing new products and getting recognized for these launches allow key players to enhance their brand value globally.

Key Industry Development:

June 2024: Communications & Power Industries (CPI) announced the spin-off of its Electron Device Business, which now operates as an independent entity. This newly formed company specializes in the development and production of a wide range of RF and microwave products, serving vital defense and commercial applications.